Integration of Gender-sensitive Approach to Safe Motherhood Program for the Prevention of STD/ HIV in Iran: A Qualitative Study

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Background & aim: Sexually transmitted infections (STIs) present a serious public health burden, which are considered as the factors contributing to acute illnesses, infertility, long-term disability, and mortality. The aim of the present study was to provide an in-depth understanding of the participants’ perceptions about the integration of gender-sensitive approach to safe motherhood program for the prevention of STIs/human immunodeficiency virus (HIV) in Iran.

Methods: This qualitative exploratory study was conducted on 32 male and female key informants, including health managers, health policy makers, and reproductive health providers. The participants were selected through the purposive sampling method, followed by the snowball sampling technique. The data collection was performed using the semi-structured interviews. The data were analyzed through the content analysis.

Results: Based on the results, the participants’ perceptions were categorized into two categories, namely the STIs/HIV prevention among males in safe motherhood and gender-sensitivity in primary maternal STIs/HIV prevention. Each of the patients was further divided into codes. The first category includes accountability to men’s own sexual health needs’ and prevention of ill-health effects of men on women’s STIs/HIV status and the second category includes (1) condom negotiation skills in women (2) mandatory pre-marital HIV test policy, (3) partner notification guidelines, (4) STI/HIV risk assessment in safe motherhood services, and (5) women’s right-based instruction for prenatal HIV screening in private services.

Conclusion: As the findings of the present study indicated, the health policy makers were not adequately sensitive to gender sensitivity, which is particularly crucial for STIs/HIV prevention in the safe motherhood programs.

Introduction

Globally, sexually transmitted infections (STIs) present a serious public health burden and are recognized as one of the major contributing factors to acute illnesses, infertility, long-term disability, and mortality (1). As indicated in the growing body of evidence, the global incidence of STIs is substantially increasing (1, 2). According to the World Health Organization (WHO), there are annually over 90, 62, and 12 million cases of Chlamydia trachoma (C. trachoma) infection, Neisseria gonorrhoeae (NG) infection, and syphilis, respectively, in the males and females aged 15-49 years.

It is estimated that out of the 15 million (13.3%) new identified cases of STIs among the individuals within the age of 15-49 years,
approximately 2 million infections occur in the pregnant women (3). In addition, the direct physical, psychological, and social consequences of STIs have a major impact on the quality of life, which are the prime indicators of the quality of global sexual and reproductive health care. Equitable access to primary health care and provider’s expertise in the risk assessment, screening, and treatment of STIs are critical factors in the prevention of the adverse pregnancy outcomes (4).

Every year, an estimated 200 million women in the world become pregnant, among whom approximately 2.5 million are identified as HIV-positive. This fact presents the world’s health services with major challenges regarding the protection of the pregnant women who have not acquired the virus against the respective complications. In other words, annually, 99% of the women who become pregnant need empowerment and assistance in order not to be affected by HIV (3). The biological, social, cultural, economic, and gender-based factors that contribute to women’s vulnerability to HIV/acquired immunodeficiency syndrome (AIDS) and other STIs are readily well-documented (4-6).

No epidemiological surveys of STIs have been conducted in Iran owing to technical, economic, and social barriers (7). Furthermore, the local studies are infrequent and uneven in their coverage of various groups (8). Based on the annual official reports, one million cases of STIs have so far been identified in Iran. This attaches special prominence to this issue and necessitates focused attention on the part of the Iranian health authorities, placing it at the upper half of the countries’ health priority list (i.e., authorities need to work against the spread of STIs).

Moreover, the prevalence of some factors signifies the importance of directing extra attention to high-risk sexual behaviors. These factors include the high proportion of youth in Iran and an alarming increase in the level of their involvement in risky sexual relations/behaviors (as observed in the recent studies reporting 20-30% extramarital sex in single men and 70% mulipartnerity), commercial sex and sexual relations of men with their temporary wives as contributing factors to gonorrhea (64% and 24% of the men are affected by means of commercial sex and sexual relations with their temporary wives, respectively), and the frequency of dissatisfaction with condom use (reported by one fifth of the female workers, who are consistent condom users in Tehran, and less than a quarter of the young people with pre-marital sex) (9).

Unsafe sexual intercourse is one of the leading causes of acquiring HIV in the females. Good examples are those regions/provinces where men immigrate to seek jobs (10). In such cases, the rate of virus transmission via sexual intercourse is equal to that of drug injection (11). According to the experts, the role of sexual intercourse, as one of the contributing factors to HIV and STIs, has not been fully considered (11). Based on the WHO (2010), most of the infections occurring before the conception and during the pregnancy are neglected by many women due to their limited access to respective health care and drugs or the mildness of the STIs symptoms.

Safe motherhood critically depends on the provision and practice of high-quality reproductive health care measures and must involve empowerment strategies. The safe motherhood is achieved by fulfilling the rights of the women (12). Like feminine, such labeling issues as family planning, pregnancy, childbirth, and child health have often led to the exclusion of men from spaces and services providing the opportunity to learn more about reproductive, maternal, and child health (13). Meanwhile, the equal right of both genders to have access to health services should be recognized.

The definitions of safe motherhood are based on an exclusively women’s right approach to the inclusion of men. As a human right issue, both men and women ought to have access to reproductive health services. The gender-sensitive safe motherhood incorporates processes that enable the men and women across all segments of society to advocate their rights. There is also a particular need to involve both males and females during the pregnancy and breastfeeding periods in effort to prevent STIs and HIV. This aids the women to seek effective ways for the removal of gender inequities, which are critical for successful STI/HIV prevention interventions (14).
The majority of the current studies have focused on investigating the spread of sexually transmitted diseases during the pregnancy. Traditional beliefs and doubts about the harms of sexual intercourse on the mother and neonate during the pregnancy and health workers conveying incorrect information may lead to long marital sexual abstinence during the pregnancy and postpartum (15). During this time, men may fall victim to extra-material sex without a condom (16-18), which may in turn lead to woman’s STI /HIV seroconversion during the pregnancy (18).

The prevention interventions around the globe indicate that the women find it difficult to choose or enact condom use given that they are largely used by men. Furthermore, it is revealed that the gender-power relations affect safer sex negotiations (19). However, the enhancement of the negotiation skills in the females, their empowerment to request condom use, and elevation of their awareness about the importance of having sex with one partner do not guarantee the monogamy of the partners (20).

Studies also stressed the correlation between the traditional gender roles and risk factor(s), revealing how men are socialized to initiate and expect sex unlike the women who are accustomed to be responsive to their request and focus on the partners’ wants and needs (21). Despite the global identification of gender-related effects on STI prevention, particularly during the pregnancy, the safe motherhood program does not support drawing men’s attention to defending their reproductive rights or those of their spouses.

Contrary to the stated assertions, these programs raise the chance of identifying sexual inequalities (which may play a prominent role in the spread of sexually transmitted diseases) and aid the women in the elimination of the risk factors associated with gender-related effects. With this background in mind, the present qualitative exploratory study was conducted to provide an in-depth understanding of the participants’ perceptions about the integration of gender-sensitive approach to safe motherhood program for the prevention of STIs/HIV in Iran.

**Materials and Methods**

**Study design and sampling**

This qualitative exploratory study was conducted on 32 key informants working in the health policy and reproductive health areas. The participants included policymakers (n=10), academics (n=9), and reproductive health providers (n=13), who were selected using the purposive sampling method, followed by the snowball sampling technique (Table 1). All policy makers worked in the Tehran Ministry of Health and Medical Education and the other participants worked in Shiraz governmental clinics. Caution was exercised to include those individuals with adequate knowledge and experience about the reproductive health services at local and national levels.

**Data collection**

The data were collected using semi-structured interviews. The interview was validated by three experienced university professors of reproductive health. Additionally, the participants’ opinions about the gender-related issues in the safe motherhood services, the social norms affecting STIs prevention, and their experiences in effective screening were also considered in validating the interview. The interviews were performed in the state clinics and managers’ offices and designed so that it gave the participants the chance to clarify their opinions and respond to the prompts. The direct interviews were audio-recorded, and each interview took 45-90 min.

A supplementary interview was sometimes needed to explore the complete perception. The interviews were continued until data saturation, and finally, 34 interviews were carried out. The collected data were analyzed using the inductive content analysis approach. To this aim, the researchers read and coded the

<table>
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<th>Table 1. Descriptive statistics of the participants’ age and work experience</th>
<th>Mean±SD</th>
<th>Median (inter-quartile rang)</th>
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<tbody>
<tr>
<td>Age</td>
<td>44.8±6.30</td>
<td>43.50(29-51)</td>
</tr>
<tr>
<td>Experience</td>
<td>16.21±7.30</td>
<td>15.50(5-21)</td>
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interview transcripts and field notes. Subsequently, they generated initial codes from the ideas and notes explored in the interviews. The codes were examined for groupings and the ones that formed a broader theme were identified. To ensure the trustworthiness of the study, the Lincoln and Guba’s criteria were employed (22).

**Ethical considerations**

The present project was submitted to the Ethics Research Committee of the Shahid Beheshti University of Medical Sciences, Tehran, Iran, and approved under the code number of SBMU.REC.1393.452. Informed consent was obtained from all the participants. Additionally, they were assured about the confidentiality of their information and the possibility to withdraw from the study as soon as they intended to.

**Results**

According to the results, 22 participants were female. Based on the collected data, two main categories were formed, namely the prevention of STIs/HIV among the males in the safe motherhood program and gender-sensitivity in primary maternal STIs/HIV prevention. Each of the categories was further divided into some subcategories. The former was divided into two categories, including the accountability to men’s own sexual health needs and the prevention of the men’s adverse health effects on women’s STIs/HIV status.

1. **Gender-sensitive approach to the prevention of STIs/HIV in males**

On the other hand, the latter was categorized into five groups, including condom negotiation skills in women, mandatory pre-marital (including temporary marriage) HIV test policy, partner notification guidelines, STI/HIV risk assessment in safe motherhood services, and women right-based instruction for prenatal HIV screening in private services (Table 2).

1.1. **Accountability to men’s own sexual health needs**

The majority of the participants pointed to the fact that a gender-equitable approach, which involves the men in the safe motherhood programs, has been neglected. They acknowledged that only integrated STIs/HIV program works effectively. One of the participants simply puts it: "The role of men in our health environment has been oversimplified and is merely approached from their impact on females’ reproductive health. This approach is clearly

<table>
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<th>Theme</th>
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<td>Integration of gender-sensitive STIs/HIV prevention to safe motherhood program</td>
<td>1- Prevention of STIs/HIV among males in safe motherhood program</td>
<td>a- Accountability to men’s own sexual health needs&lt;br&gt;b- Prevention of ill-health effects of men on women’s STIs/HIV status</td>
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<td>2- Gender-sensitivity in primary maternal STIs/HIV prevention</td>
<td>a- Condom negotiation skills in women&lt;br&gt;b- Mandatory pre-marital (including temporary marriage) HIV test policy&lt;br&gt;c- Partner notification guidelines&lt;br&gt;d- STI/HIV risk assessment in safe motherhood services&lt;br&gt;e- Women’ right-based instruction for prenatal HIV screening in safe motherhood services</td>
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STI: sexually transmitted infection, HIV: human immunodeficiency virus

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**Table 2.** Theme, categories, and codes extracted from participants perception towards the integration of gender-sensitive STIs/HIV prevention to safe motherhood program

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reflected in the governmental documents that address the reproductive health goals. For instance, one does not usually come across any signs of establishing male-friendly services or monitoring men-sensitive indicators. The safe motherhood program is a window of opportunity for educating the men regarding safe sex skills and talking about their sexual health discomforts.” (Safe motherhood manager with 10 years of experience)

The participants considered the traditional STI prevention to be ineffective and recommended the development and practice of new approaches:

“In reality, our health providers block the men's involvement in STI screening in the antenatal clinics. The fact is deeply rooted in our cultural and political beliefs and values, which reject the men's involvement in such programs. For instance, there is no yardstick for the measurement of the men's knowledge and/or skills in condom use, access to STIs services, fertility desire and problems, etc.” (Safe motherhood provider with 20 years of experience)

1.2. Prevention of ill-health effects of men on women STIs/HIV status

According to the participants, the men's assumptions of masculinity, their right to greater power, and the effect of these assumptions on their health and their wives are among the factors that should be considered in the safe motherhood education program:

"Neglecting the men's need for STIs prevention knowledge and access to services often results in increased morbidity of both men and women. The men are often less knowledgeable about sexual problem(s) and STIs, compared to the females; however, they are reluctant to admit. The preconception STIs counseling and screening could be regarded as an entry-point and a path to the transfer of sexually transmitted diseases from males to females. These counseling and screenings can also be a starting point for developing talks, raising issues about sexual risks, and correcting the manhood cultural misconception” (STIs prevention manager with 20 years of experience).

System barrier was another factor pointed out by the participants:

“We have no practical guidelines to prevent the men from getting involved in risky sexual behaviors while their wives are pregnant. We lack appropriate facilities and/or health providers to support the infected men even when the women report their husband’s symptoms, which result in the spread of the infection” (STIs prevention manager with 15 years of experience).

2. Primary maternal STIs/HIV prevention and gender-sensitive factors

Most of the participants stressed the importance of primary prevention of STIs/HIV among the women of reproductive age to reduce vertical transmission. The key informants talked about the guidelines and practical instruments, based on which the gender-sensitive factors affecting the successful practice of STIs/HIV prevention programs emerged.

2.1. Condom negotiation skills in women

The participants mentioned the gender inequity and women's lower power status to initiate condom use as the gender-related barriers to primary STIs:

"Some pregnant women report their reluctance to have sex with their husbands who seem to have had extra-marital relations, which resulted in being abused by forced sex, and consequently vaginal or anal tears that can expedite STI transmission. The females are helpless, and they are not equipped with condom use negotiation skills or unable to resist engaging in risky behavior.” (STIs prevention provider with 40 years of experience)

An expert safe motherhood provider explored the causes of the women's inability in condom use negotiation with their husbands as follows:

“The women's inability to negotiate condom use contributes to such factors as the lack of confidence, worries about men resorting to extra-marital sexual relations in the absence of proper sex at home, and our system's inability to protect the women's reproductive rights. This results in the exposure of the women to insecure sexual intercourse and an increase in STIs including HIV/AIDS.” (STIs prevention provider
with 10 years of experience)

The STIs prevention counselors emphasized the importance of protecting women’s reproductive rights in the safe motherhood guidelines:

"The majority of the pregnant women at risk are monogamous and married. Most of them know about their husband’s risky behavior and almost all are afraid of the chance of getting STIs from them. They talked about their problems; however, unfortunately, there are no guidelines to help them." (Safe motherhood provider with 20 years of experience)

2.2. Mandatory pre-marital (including temporary marriage) HIV test policy

Most of the participants agreed with pre-marital and pre-conception mandatory HIV test. Meanwhile, they said that they were restricted by law(s). A marital counselor stated:

"The current laws governing marriages are in need of revision. Today, the marriage age in Iran for girls and boys has considerably increased. This increase in turn enhances the chances of getting involved in pre-marital sexual relations, which in turn endangers their health and that of their future partners. It is common knowledge that most of the infected women get affected via marital sex. We need to screen and treat those infected people who seek medical assistance." (Family health manager with 15 years of experience)

Additionally, an expert STIs preventive manager expressed:

"Temporary marriages are performed easily and people interpret it in different ways. Regarding this, the health managers should devise a plan and facility to prevent STIs from spreading. This may be achieved by encouraging the infected individuals to clarify their infectious status because they might belong to the high risk group." (STIs prevention manager with 20 years of experience)

2.3. Partner notification guidelines

Another issue that appeared in our study was the STIs partner notification. The females’ perceived gender-related barriers to tell their partners were highlighted by a STIs program manager as follows:

"I think that women are afraid of telling their husbands about STIs, especially when it comes to AIDS. For example, there were times that we asked the infected women to ask their husbands to come in for a talk. The women expressed their fear; however, they said that they were not in a position to tell their husbands about STIs. Some even mentioned the right of men in getting re-married, and they were afraid of rejection and accusation of extra-marital relationships." (STIs prevention manager with 14 years of experience)

The majority of the participants stated that the political advocacy of women’s rights could oblige the men to notify their wives:

"In one case, we had a HIV-positive male patient, who had not informed his wife about his illness. In fact, he had been well aware of his illness for years without telling his wife. The result of this was a pregnant HIV-positive woman. More interestingly, he did not feel the least pity, assuming that he had done the right thing." (Health behavior diseases specialist with 10 years of experience)

The legislation of gender-sensitive partner notification was highlighted by almost all the participants:

"Treatment of STIs may require making confessions about having had different sex partners. This may be harmful to the patient’s family structure. Therefore, even in cases where men with STIs infection are identified, we are unable to inform their wives. We are left with no choice than to stay neutral and avoid getting involved in the person’s private life. The problem would be much easier to handle if a ‘Right-Based Partner Notification Act’ was passed. We need to be empowered to protect the clients." (Academic member with 16 years of experience)

2.4. STI/HIV risk assessment in safe motherhood services

The majority of the providers also questioned the effectiveness of the current STI/HIV risk assessment in the antenatal clinics:

"We are left with HIV-positive women who are diagnosed when it is too late. For instance, in the private hospitals, prior to cesarean section, he women have routine antenatal visits even though they prefer to say nothing about their risk factors. It is unrealistic to expect the
providers to explore such a sensitive issue in a typical limited consultation time framework and improper context."

Another expert provider added:

"In further examination, I found that many women in this clinic had been exposed to their husband's risky sexual behavior without reporting it" (Family health provider with 12 years of experience)

The interviews showed the necessity to establish an environment that encourages the client's disclosure of private information:

"A deep understanding of the aspects of STIs risk assessment requires specialty, spending time, and counseling skills. However, this sensitive issue does not usually receive especial attention. We ask about the clients' sexual relations in the same way we do for nutrition or immunization status." (Academic staff with 20 years of experience)

2.5. Women right-based instruction for prenatal HIV screening in safe motherhood services

The key informants explained the hidden problems arisen from the lack of a unique standard for prenatal HIV screening and women's reproductive rights:

"The midwives and obstetricians tell the clients that HIV testing is a routine part of the prenatal care, which is requested with other routine antenatal tests without pretest counseling. After the involuntary disclosure of the women’s HIV status, we face mothers who decide to terminate their pregnancies or husbands who stigmatize their wives. A great number of antenatal services are covered by the private sectors, which are not familiar with the women’s reproductive rights. The health managers do not monitor the quality of prenatal HIV screening." (Midwife with 20 years of experience)

Another STI counselor added:

"We live in a society with gender inequity where women are easily stigmatized. The health managers should oblige the testing centers (private sectors) to keep the HIV test results confidential. The administration of effective pre- and post-test couple counseling, enhancement of the couple’s knowledge about AIDS, and provision of psychological supports are also necessary." (Health behavior diseases specialist with 10 years of experience)

A health manager puts it as follows:

“My many years of experience working with HIV-positive patients tell me that after the disclosure of the HIV-positive status of couples, most of the men put the blame on their wives. The men emphasize their right to remarry or divorce the infected women. Therefore, the gender-based discrimination requires close attention." (Maternal Health manager with 24 years of experience)

Discussion

The participants reviewed the existing safe motherhood program and identified the factors that affected successful STIs prevention. The interviews in the present study stressed many gender-related factors, which were neglected in our policies. Basic approach to men's involvement and its prominence were investigated on two grounds, namely men's own sexual health needs and rights, and men's sexual health effect on maternal and neonatal health.

Overall, the results of other qualitative studies are in line with our findings indicating that he young men without access to information and guidance about sexuality and protective sexual behaviors are ill-prepared to navigate their sexual lives (23). While the safe motherhood program could be the onset of treating men’s sexual diseases, they had limited access to these services. Based on our participants' disclosure, he men have little contact with the formal health system, and even less engagement with the preventive health services. However, in a similar situation, other researchers showed that the men seek curative services and often prefer a traditional healer or a visit to the pharmacy over a health center (24).

Moreover, many men and women request greater male involvement in maternal and child health services (25, 26). The participant's opinions along with other findings clearly signaled the presence of health system barriers, which prevent or lower the men's active involvement during pregnancy and postpartum. This raises the feeling of 'being left out' in men and confirmed by other studies (27-29).

The second pattern that emerged in the
present study was gender-sensitivity in primary maternal STIs/HIV prevention. The promotion of condom use negotiation skills was perceived as one of the essential elements for the prevention of STIs in the pregnant women. The participants stated that condom distribution among women would have no effect unless the women were empowered to protect themselves. Likewise, another study conducted in Cambodia demonstrated the effects of this inability in the females and reported the reduction of HIV prevalence among the sex workers and its rapid elevation among the married women.

Almost 50% of all married women, who contracted the virus in 2002, were infected by their husbands (30). Our participants emphasized on gender-sensitive interventions. According to the previous studies, these new insights attempt to help the women develop self-efficacy, negotiate safer sex, know their bodies, as well as recognize and challenge gender inequalities in their own lives and relationships (19, 31). According to the literature, apart from preventing a pregnancy, men consider condom use within inter-marriage sex as a sign of distrust on the part of their partners (32, 33).

The findings of the present study indicated the need to develop effective strategies to improve young single men and women’s access to STIs information and screening services, which could lead to the reduction of STIs risk in pregnancy. It was perceived that many infected youths who intend to get married are unaware of their own and their partner’s HIV status. Consistent with other studies, the present study highlighted the need for the development of a comprehensive approach to premartial laws.

In Saudi Arabia, it is mandatory for all the couples who want to get married to undergo premartial HIV testing as well as pre- and post-test counseling (34). The main aim of including HIV test to the premartial check-up in 2008 was to prevent HIV transmission to the lately married women. Almost 97% of the heterosexually infected women in Saudi Arabia acquired HIV from their husbands (35).

As expected, the authors of the present study identified STIs transmission in the pregnant women, who were not involved in risky sexual behavior(s). The majority of these women had been affected by their husbands who were either unaware or reluctant to inform their wives about their illness. Regardless of the sector or the level and type of specialty, the participants reached consensus on the need to pay more attention to partner notification policy in the safe motherhood program.

Gender-related factors, such as women’s disempowerment and lack of knowledge about reproductive health rights, were stressed by many informants as the major barriers to STIs prevention. Based on the previous studies, the major impediments to successful partner notification include the stigma associated with STIs (especially in extra-marital sexual intercourse) (36, 37), gender, power structure, partner type (38), as well as fear of abuse and rejection were.

Despite the difference in expression, most of the participants agreed that the disclosure of risky sexual behavior was not justified without the employment of trained counselors, empowerment of women, and consideration of the discrimination needs in a culturally adjusted environment. The current safe motherhood program(s) depend on limited women’s reports about their husbands’ risky sexual behavior(s). In another study, which investigated the risk assessment accuracy, the race, gender matching (14, 38), age, and perceived sexual orientation of the counselor were reported to affect the disclosing risky behaviors.

Self-serving bias (i.e., wishing to be viewed in a positive light) may result in underreporting private sexual behaviors that are perceived stigmatizing (39). In addition, in another study (40), it was shown that the assurance of acceptance or even receiving non-judgmental responses could be the limitation of risky sexual behavior disclosure.

The participants acknowledged that to avoid the violation of women’s rights, the system of HIV testing in the non-governmental centers needs to be revised. There was an urgency to clarify rights-based practical guides to support the pregnant women with prevention efforts and obtain the full benefits from learning about their HIV status for themselves and others. Studies showed that gender differences in testing increased the women’s risk of stigma.
and discrimination (41). Additionally, other studies have indicated the need to develop screening tools and new counseling approaches to ensure the safety of women (42).

**Conclusion**

The STIs present a serious public health burden, which are accepted as the leading factors causing acute illnesses, infertility, long-term disability, and mortality in both developed and developing countries. Health services have begun a campaign against these infections. Despite the taken measures, STIs are rapidly increasing, particularly among the youth. As an alternative, both governmental and non-governmental health services are trying to decrease its harmful effects.

The pregnant women could be a good starting point in this regard. Based on the findings of the present study, empowering women, enhancing women's condom use negotiation skills, eliminating gender inequality, involving men in safe motherhood programs, building trust among couples, developing mandatory pre-marriage HIV test programs, and keeping the status of HIV women confidential are only but some of the measures that can be taken to prevent the transition of STIs from men to women and their children. Nevertheless, the government functionaries are not adequately sensitized to gender sensitivity, which is particularly crucial for STIs/HIV prevention in the safe motherhood programs.

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**Conflicts of Interest**

We have no conflicts of interest to declare.

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